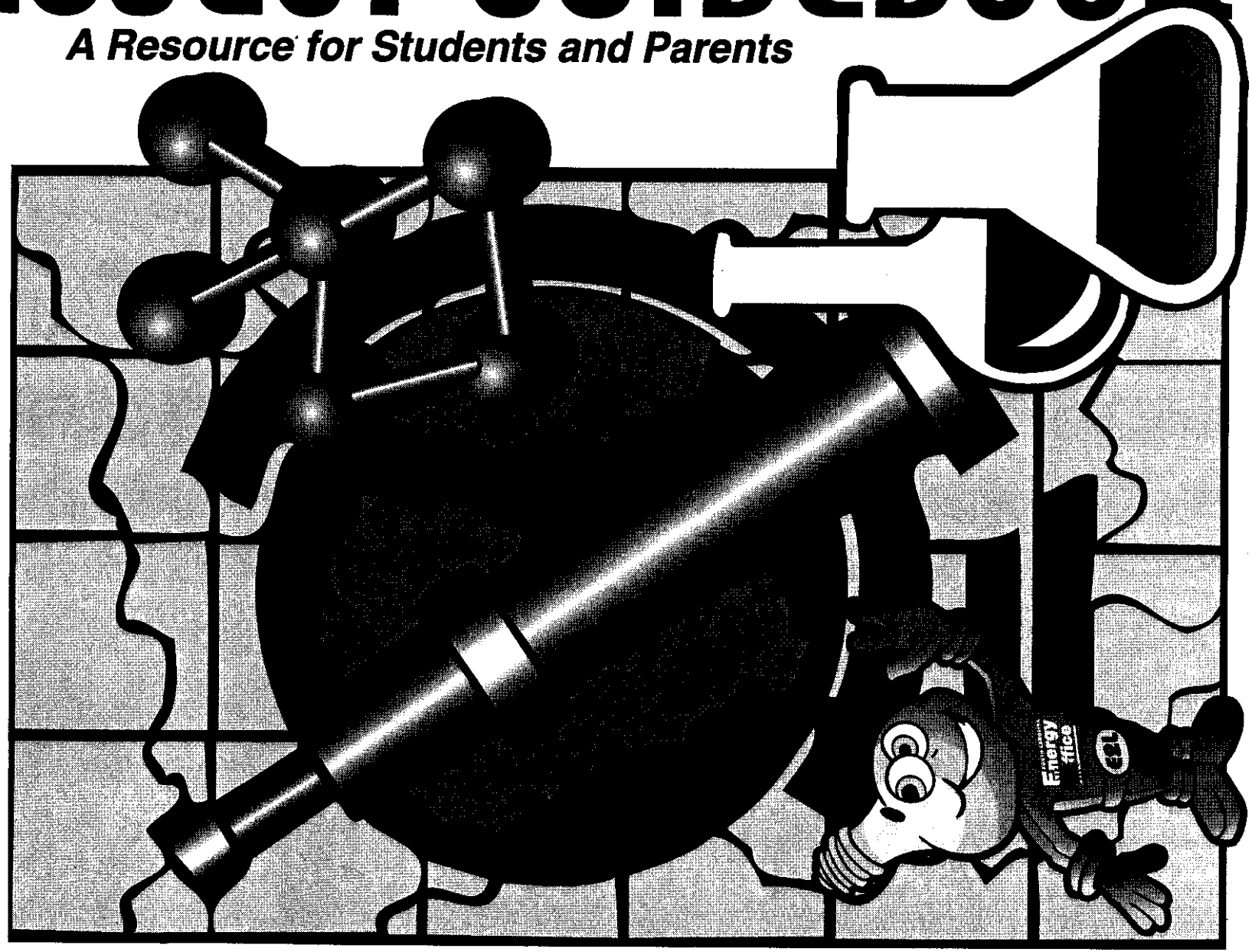
SCIENCE FAIR PROJECT GUIDEBOOK

A Resource for Students and Parents



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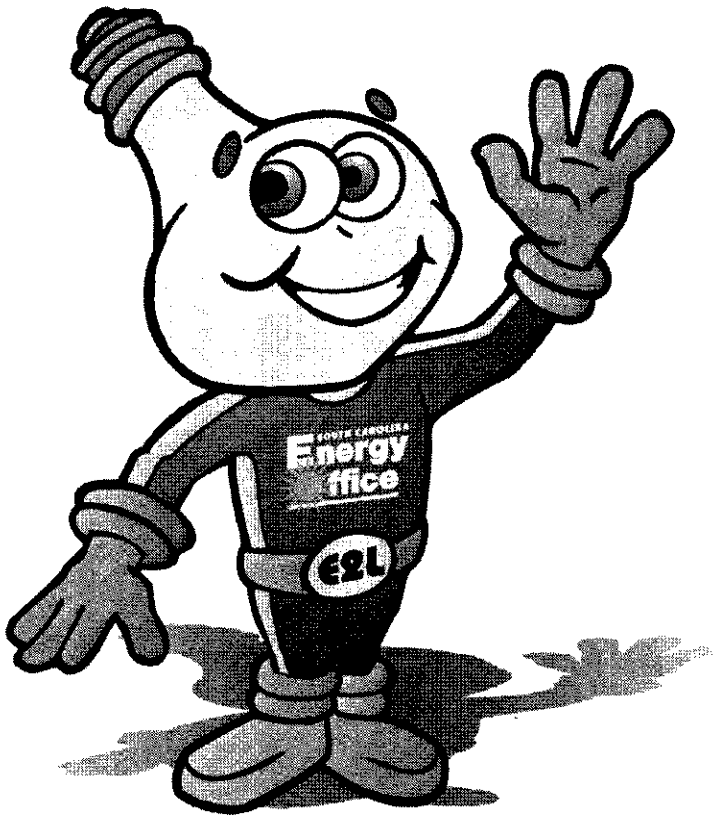

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Table of Contents

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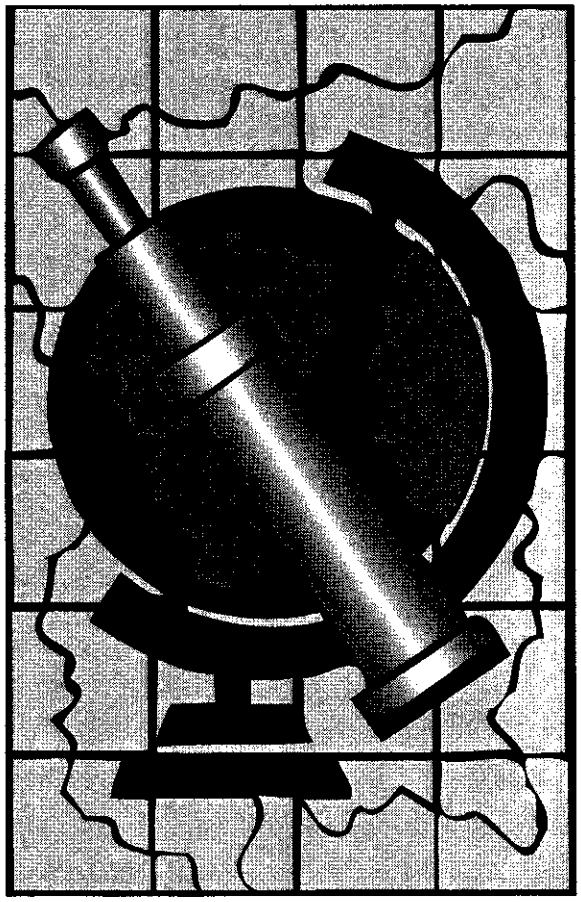
Introduction

It seems that nothing strikes fear in the hearts of students and parents like these three words: science fair project.

But it doesn't have to be that way. A science fair project is an opportunity to research and learn about things that interest you. And through your studies you will learn how science is basic to everything around us.



You will benefit beyond your improved science knowledge. Science fair projects teach you problem-solving skills, improve your written and oral communication ability and give you the satisfaction of completing a well-done project.

The ideas for projects are endless; you are limited only by your imagination. For example, does dirty dish water affect the growth of plants? Or how does acid rain affect plant growth? Which diapers are the most absorbent? What is the pH of various shampoos? Do different brands of gasoline make a difference in gas mileage?

The first key to a successful science fair project is picking a topic that interests you. The reason is simple: you will be motivated to do a better job on the project and will have fun doing it. And remember, a good science fair project doesn't have to be complicated. It is important that you understand your project and that you have explored the scientific and technical issues related to your project.

The second key is careful planning. After discussing your project with your teacher and getting approval for your idea, allow yourself plenty of time for research, experiments, observation and analysis. In other words, don't wait until the last minute. Projects take time.

Ask questions about your project, but do the work yourself. If you do the work yourself, you will get a much better understanding of why things do and do not work as expected.

Finally, don't get upset if your experiments prove your hypothesis incorrect. Throughout history, some of the most important experiments were those that didn't prove the original hypothesis.

On the following pages are basic ingredients for a science fair project and tips for a great display. There are also 10 ideas for science projects showcasing different forms of energy. We have come to rely so heavily on energy that we would be quite lost without it. The energy we rely on most today is non-renewable, and will run out eventually. It is important that we learn about renewable energy - energy that will last forever. These sources can be found all around us in water, the sun, natural gas, wind and other forms that have not yet been harnessed. Who knows, by performing one of the energy science projects in this book, you may unlock the secret of a new energy source for the future.

Good luck.